

CLAIMS

(027) What is claimed and desired to be secured by the United States Patent Office is:

1. A weight-bearing support insole for application into any shoe or boot having a sole and a heel counter, the insole support system comprising:

A varying medial longitudinal arch constructed in FOUR VARYING DEGREES of arch height (low degree, medium degree, high degree, and extreme degree)

A biomechanically shaped weight-bearing support insole in which will cooperatively support all three arches, heel, and bone structure of foot by providing a true WEIGHT-BEARING INSOLE

A support system for the lateral longitudinal arch

A support system for the transverse (metatarsal) arch

A deep heel-cup support system

2. The weight-bearing support insole of claim 1, wherein the four degrees of medial arch support comprises:

four varying medial arch degrees which extend inwardly along the medial side portions to provide the correct and maximum support beneath the selected medial area of the user's foot to become a firm yet flexible insole which will distribute weight-generated forces into a neutral plantigrade position helping to prevent pronation

the degree of the medial arch is cooperatively dependent with the length (insole size) of each individual insole, as well as the degree of arch (low, medium, high, extreme) that equally represents the size

accommodating curvatures of the bone structure having multiple degrees of support thus will control motion reducing excessive stress to muscles, tendons, ligaments, and joints

3. The weight-bearing support insole of claim 1, wherein the biomechanical support system comprises:

a weight-bearing fit of any shoe or boot consisting of an outer generic sole and heel counter

a substantially firm, supportive, flexible material which allows the three arches to work in juxtaposition to one another and to control excess motion

4. The weight-bearing support insole of claim 1, wherein said support system for lateral longitudinal arch comprises:

a substantially rigid, outer support wall which extends generally upward along the lateral side portion having a standard degree of height relative to the size of the medial arch and also the length of the insole

an outer support wall which will help control supination of the foot, control motion, and allow the foot to balance equally in a neutral position, causing little to no stress on the foot, ankle and tendons of the leg

5. The weight-bearing support insole of claim 1, wherein said support system for the transverse arch comprises:

a substantially rigid, upward support in the metatarsal portion

6. The weight-bearing support insole of claim 1, wherein said a deep heel-cup support comprises:

a downwardly concave heel cup portion providing stability, distribution of body weight, motion control, and comfort for the user's foot

a deep heel-cup will allow the user's foot to be imbedded deep inside the inner shoe, eliminating the foot to raise or slip out of upper portion of shoe

a heel cup including a strong supportive side wall extending upwardly from the insole heel base